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June 2, 2005

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Attention: TSCA Section 8(e) Coordinator

Re: Methyl Oxirane (CASRN 75-56-9)



Dear Sir or Madam:

The American Chemistry Council's Propylene Oxide/Propylene Glycol (PO/PG) Panel (Panel), on behalf of its members,¹ is submitting the following information to the EPA pursuant to current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substances Control Act. The Panel has made no determination as to whether a significant risk of injury to health or the environment is actually presented by the findings.

The test substance methyl oxirane (CASRN 75-56-9) – also known as propylene oxide – was administered by inhalation to groups of 8 male B6C3F1 mice and 8 male F344 rats at 0, 50, 100, 200, and 400 ppm for 20 days at 6 hours/day. Initial microscopic examination of the nasal sections from both species indicate bilateral hyperplasia of transitional epithelium lining the lateral meatus in the proximal nasal airways along with atrophy of the olfactory epithelium lining the dorsal medial meatus at the highest dosing level.

These effects were previously reported in rats following inhalation exposure to propylene oxide (Eldridge *et al.*, 1995; Rios-Blanco *et al.*, 1997; 2003). Mice have not been studied previously. No tumors were induced in the nasal olfactory epithelium in rats or mice following chronic inhalation exposures (NTP, 1985; Lynch *et al.*, 1984; Kuper *et al.*, 1988).

No written report of these initial microscopic evaluations is yet available.

If you have any questions, please contact me at (703) 741-5630 or via email at anne_lehuray@americanchemistry.com.

Sincerely yours,

Anne P. LeHuray, Ph.D.
Manager, Propylene Oxide/Propylene Glycol Panel
Director, CHEMSTAR®



¹ PO/PG Panel members are The Dow Chemical Company, Huntsman Corporation and Lyondell Chemical Company.



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